a buffering unit having a buffering chamber having a volume at least equal to the injection quantity of the resin per shot, said buffering unit receiving the resin plasticated in the plasticating unit during an injection by the injection unit, and said buffering unit feeding the resin held in the buffering chamber into the injecting unit during measuring resin into the injection unit,

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a plunger reciprocatably in said buffering unit, and

a detecting sensor detecting a measurement of the plunger.

- 2. (Amended) A thermoplastic resin injection molding machine as claimed in claim 1, in which said buffering unit comprises a pot, the plunger disposed in the pot applicable to be moved forward and backward in the pot, the buffering chamber provided between the pot and the plunger for reserving the plasticated resin, and means for energizing the plunger in the resin extrusion direction.
- 35. (New) A thermoplastic resin injection molding machine according to Claim 1, wherein said plunger connecting a piston rod, and said detecting sensor detecting a measurement of the piston rod.



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36. A thermoplastic resin injection molding machine comprising:

a plasticating unit for plasticating a thermoplastic resin,

an injecting unit connected to the plasticating unit through a connection passage to

inject the plasticated resin into a mold,

a buffering unit having a buffering chamber having a volume at least equal to the injection quantity of the resin per shot, said buffering unit receiving the resin plasticated in the plasticating unit during an injection by the injection unit, said buffering unit feeding the resin held in the buffering chamber into the injecting unit during measuring resin into the injection unit, and

a pressure sensor detecting a pressure in said buffering chamber.

- 37. (New) A thermoplastic resin injection molding machine as claimed in claim 36, in which said buffering unit comprises a pot, a plunger disposed in the pot applicable to be moved forward and backward in the pot, the buffering chamber provided between the pot and the plunger for reserving the plasticated resin, and means for energizing the plunger in the resin extrusion direction.
- 38. (New) A thermoplastic resin injecting molding machine as claimed in claim 37, in which the energizing means comprises a spring.
- 39. (New) A thermoplastic resin injection molding machine as claimed in claim 37, in which the energizing means comprises a fluid-pressure cylinder.

- 40. (New) A thermoplastic resin injection molding machine as claimed in claim 37, in which the energizing means comprises an electric actuator.
- 41. (New) A thermoplastic resin injection molding machine as claimed in claim 39, in which a constant fluid pressure from a fluid pressure source is transmitted to the fluid-pressure cylinder.
 - 42. A thermoplastic resin/injection molding machine comprising: a plasticating unit for plasticating a thermoplastic resin,

an injecting unit connected to the plasticating unit through a connecting passage to inject the plasticated resin into a mold,

a buffering unit having a buffering chamber having a volume at least equal to the injection quantity of the resin per shot, said buffering unit receiving the resin plasticated in the plasticating unit during an injection by the injection unit, and said buffering unit feeding the resin held in the buffering chamber into the injecting unit during measuring resin into the injection unit,

a screw in said plasticating unit, and

a position detecting sensor detecting a measurement of said screw.

43. (New) A thermoplastic resin injection molding machine as claimed in claim 42, in which said buffering unit is contained in the plasticating unit, the screw is disposed

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to be moved forward and backward, and means for energizing the screw in the resin extrusion direction.

- 44. (New) A thermoplastic resin injecting molding machine as claimed in claim 43, in which the energizing means comprises a spring.
- 45. (New) A thermoplastic resin injection molding machine as claimed in claim 43, in which the energizing means comprises a fluid-pressure cylinder.
- 46. (New) A thermoplastic resin injection molding machine as claimed in claim 43, in which the energizing means comprises an electric actuator.
- 47. (New) A thermoplastic resin injection molding machine as claimed in claim 45, in which a constant fluid pressure from a fluid pressure source is transmitted to the fluid-pressure cylinder.
- 48. (New) A thermoplastic resin injection molding machine comprising:

 a plasticating unit for plasticating a thermoplastic resin,

 an injecting unit connected to the plasticating unit through a connecting passage to inject the plasticated resin into a mold,

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a buffering unit having a buffering chamber having a volume at least equal to the injection quantity of the resin per shot, said buffering unit receiving the resin plasticated in

the plasticating unit during an injection by the injection unit, and said buffering unit feeding the resin held in the buffering chamber into the injecting unit during measuring resin into

the injection unit,

a screw in said plasticating unit,

a piston rod connecting said screw, and

a position detecting sensor detecting a measurement of said piston rod.

- 49. (New) A thermoplastic resin injection molding machine as claimed in claim 48, in which said buffering unit is contained in the plasticating unit, the screw disposed to be moved forward and backward, and means for energizing the screw in the resin extrusion direction.
- 50. (New) A thermoplastic resin injecting molding machine as claimed in claim 49, in which the energizing means comprises a spring.
- 51. (New) A thermoplastic resin injection molding machine as claimed in claim 49, in which the energizing means comprises a fluid-pressure cylinder.
- 52. (New) A thermoplastic resin injection molding machine as claimed in claim 49, in which the energizing means comprises an electric actuator.

- 53. (New) A thermoplastic resin injection molding machine as claimed in claim 51, in which a constant fluid pressure from a fluid pressure source is transmitted to the fluid-pressure cylinder.
 - 54. (New) A thermoplastic resin injection molding machine comprising: a plasticating unit for plasticating a thermoplastic resin,

an injecting unit connected to the plasticating unit through a connecting passage to inject the plasticated resin into a mold,

a buffering unit having a buffering chamber having a volume at least equal to the injection quantity of the resin per shot, said buffering unit receiving the resin plasticated in the plasticating unit during an injection by the injection unit, and said buffering unit feeding the resin held in the buffering chamber into the injecting unit during measuring resin into the injection unit, the buffering chamber provided in said plasticating unit, and a pressure sensor detecting a detecting a pressure in said buffering chamber.

- 55. (New) A thermoplastic resin injection molding machine as claimed in claim 54, in which said buffering unit is contained in said plasticating unit, and further comprising a plunger disposed to be moved forward and backward, and means for energizing the plunger in the resin extrusion direction.
- 56. (New) A thermoplastic resin injecting molding machine as claimed in claim 55, in which the energizing means comprises a spring.



57. (New) A thermoplastic resin injection molding machine as claimed in claim 55, in which the energizing means comprises a fluid-pressure cylinder.

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- 58. (New) A thermoplastic resin injection molding machine as claimed in claim 55, in which the energizing means comprises an electric actuator.
- 59. (New) A thermoplastic resin injection molding machine as claimed in claim 57, in which a constant fluid pressure from a fluid pressure source is transmitted to the fluid-pressure cylinder.